



RESEARCH TO ACTION LAB

From Streets to Citizen Spaces

Positioning Parks and Green Spaces in an Equitable COVID-19 Recovery

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The COVID-19 pandemic has underscored both the importance and the vulnerability of many of our country's support systems. As we move toward recovery, we can strengthen policies and programs so they better support an inclusive economy and ensure equitable access to services and opportunities. This moment offers us the chance to learn from other countries and to explore how solutions they have undertaken might be applied or adapted to our circumstances.

The Urban Institute, supported by a grant from the Robert Wood Johnson Foundation, set out to study how innovative policies and programs from abroad could inform state and local efforts in the US to advance an inclusive recovery from the COVID-19 pandemic. To share what we learned, we produced five briefs, each profiling an approach from abroad that addresses a different policy priority: child care, broadband access, local economic development, parks and public space, and housing stability and affordability. A sixth brief describes the project's methodological approach. Resources from the full project are available at <https://urbn.is/lessons>.

Parks and green spaces can provide economic, health, social, and environmental benefits to individuals and communities, but without investment in or use of them, these benefits go unrealized. People's use of public space during the COVID-19 pandemic has highlighted the urgent need for places that can adapt to a variety of needs—where people can experience nature, exercise, and interact with each other. But for many people in the United States, particularly people of color and people with low incomes, quality parks and green spaces are inaccessible. In fact, parks serving mostly communities of color are, on average, half the size and five times as crowded as parks serving mostly white populations (TPL 2020). Addressing these disparities requires consistent and targeted resources, especially for operations and maintenance, but budgetary allocations for parks and recreation agencies are often deprioritized and frequently face cuts in times of austerity.¹ To harness the true value of

parks and green space as key civic infrastructure, creative solutions that democratize access are needed. US policymakers and communities launching new, equitable public space efforts or expanding existing ones could learn from innovative policies and programs in other countries. One model in particular, “superblocks” in Barcelona, Spain, is a promising and potentially adaptable strategy for repurposing streets as shared public park space. In this brief, we explore this model and its lessons for local US policymakers.

As demand for parks and open space increased during the pandemic, cities began allowing streets, sidewalks, and public rights of way² to expand and convert into spaces for curated, vibrant experiences through programming, placemaking, and art. Although we often think of parks when we think of public spaces, streets make up the largest portion of shared public spaces in our cities (UN-Habitat 2013). Restaurants and shops reclaimed street space (including parking spaces, sidewalks, and roadways) to expand seating outdoors to address health and safety concerns during the pandemic. In New York City alone, 12,000 restaurants and bars were given permission to operate outdoors,³ and some of these changes have been made permanent.⁴ These efforts have demonstrated the benefits of public space and the need for permanent civic infrastructure that can foster community and ensure an inclusive recovery from the pandemic.

The Superblock Model

Barcelona’s municipal government implemented an urban regeneration program in 2016 called superblocks (*superilles* in Catalan) to reclaim roads for parks and green space. The superblock model promotes public space by closing several streets to vehicular traffic, increasing the amount of green space, reducing noise and emissions, and strengthening social interactions among neighbors. Research shows that the removal of cars even for a few blocks has a positive impact on nearby air pollution, indicating that superblocks can demonstrate significant financial savings in climate change and resilience, particularly through reductions in air and noise pollution.⁵ Moreover, superblocks increase social cohesion, improve mental and physical health, and create gathering space for work and recreation. They have been found to improve community relations and a sense of belonging (Balanzo and Rodriguez-Planas 2017), which are critical needs in reclaiming spaces and building community as cities recover.

Several countries have adopted various elements of the superblock model to approach urban greening through a community-driven lens. In this brief, we examine the program in Barcelona as the foundation for broader application and identify the following considerations as key lessons for US policymakers seeking to adapt a similar approach:

- Capture and capitalize on the lessons from the COVID-19 pandemic.
- Optimize local government processes to facilitate the conversion of roads and rights of way.
- Examine existing policies and plans to align policy goals.
- Identify and launch pilot projects, then scale and iterate them.
- Scale the pilot into a sustainable program or plan.

Our Approach

After we understood the challenge of addressing renewed demand for open space and the opportunity for enhancing public space, we scanned programs, policies, and initiatives globally that enabled an increase in parks and green spaces by repurposing existing space away from cars and toward pedestrians. Our review included peer-reviewed journal articles, street design plans and reports, planning toolkits, government briefs, and newspaper articles. Given the challenge and importance of attaining sustainable funding, we paid careful attention to assessing the appropriateness of funding mechanisms for the US context. We were most interested in interventions that prioritized equity and demonstrated outcomes that benefit marginalized communities. In our scan, we found several strategies focused on features of tactical urbanism, whereby projects are piloted in select communities before being made permanent infrastructure (Lydon and Garcia 2015).

Although some tactical urbanism strategies have already been implemented in the US, we wanted to examine more closely those most conducive to a variety of places (cities, suburbs, and neighborhoods) and our current moment. We interviewed global experts in urban planning and design, transportation policy, and local government to field insights and recommendations on how well a variety of strategies could be adapted for US cities. This investigation led us to undertake a deeper dive into the components of the superblock model in Barcelona, which was developed before the pandemic but could prove to be a fruitful model for postpandemic urban recovery.

Where Urban Green Spaces Are and Why They Matter

Public health considerations rising from the COVID-19 pandemic have redefined how we engage with public space by underscoring the significance of parks, green spaces, and other places for outdoor recreation and socialization. Parks bring broad benefits to individuals and communities. And reclaiming space—particularly transportation corridors—for green areas, parks, and recreation has several well-documented benefits even beyond mental and physical health (Honey-Roses et al. 2020). Urban green spaces support improved public safety (Shepley et al. 2019), connect individuals with public and community services, and improve climate resilience by mitigating stormwater run-off and the increase in temperature in cities, known as the urban heat island effect (Macdonald 2007). Further, thriving parks and public spaces that foster equitable development and social inclusion can catalyze a sense of belonging and social connection where residents feel welcome and are encouraged to steward the sustainability of that public space (Garrett and Stark 2019; Gaynair et al. 2020).

Despite significant evidence on green space benefits, access to quality parks is uneven and inequitable. Approximately 100 million people in the US do not live within a 10-minute walk of a park.⁶ This lack of access is further exacerbated for people of color and low-income households. In the 100 most populous US cities, neighborhoods that are mostly populated by people of color have 44 percent less park acreage on average than predominantly white neighborhoods (Chapman et al. 2021). The quality of parks also differs significantly for low-income households. The parks these households have access to are four times smaller on average than those accessible to higher-income households in the same city (TPL 2020). As people flocked to the outdoors and sought access to open urban spaces during the pandemic, these inequities in public space became starkly evident. Lower-income communities are often more densely populated and have fewer alternatives to public spaces (i.e., private, free amenities such as roof decks or balconies) but still have lower-quality and smaller parks. For community members and policymakers, this demonstrated the importance of using an equity-focused approach to increase the supply of and improve access to public space, especially for people of color and low-income households.

Lack of equitable access to quality parks is compounded by limited funding, presenting policymakers with a difficult challenge. When governments need to trim their budgets, parks and recreation departments are often some of the first agencies to experience reduced funding (Eldridge, Burrowes, and Spauster 2019). During the first months of the pandemic, 31 percent of parks and recreation agencies reported cutting their 2020–21 budgets.⁷ To address this budget challenge, local parks and recreation departments, as well as planning departments, must be nimble and innovative by

forging partnerships, identifying cobenefits (such as climate resilience) in order to secure cofunding, and exploring approaches for community stewardship and ownership. Even with the recent infusion of federal resources through the 2021 American Rescue Plan Act, other funding priorities—combined with the insecure economic conditions experienced by many of their inhabitants—have led most municipalities to program these federal funds toward various safety-net investments such as housing, workforce development, unemployment, and education. Although these are worthwhile and urgent investments, municipalities could be missing an opportunity to invest in community resilience and health through quality, accessible public spaces, which also help advance other social priorities.

As communities transition from employing pandemic-response efforts to building a long-term, inclusive recovery, pressures are growing to ensure public and green spaces remain pillars of civic infrastructure (Shroyer, Schilling, and Poethig 2019). Since the start of the pandemic, dozens of communities have developed temporary expansions of public and green space by closing streets, launching pop-up parks, and hosting socially distanced outdoor events. In Minneapolis, Minnesota, sections of lakefront parkways and roadways have been reclaimed for recreational use;⁸ in Richmond, Virginia, unused parallel parking spaces have been repurposed into pocket parks;⁹ and Fayetteville, Rogers, and Bentonville, Arkansas, have all started Summer Slow Streets programs and traffic-calming interventions to make streets safer for public use.¹⁰ These innovative and creative adaptations of public space have allowed shops and restaurants to continue business and reclaim lost revenue despite restrictions on indoor activities; provide physically distanced space for exercise, learning, and social interactions; and widen the acreage of public space available for residents, especially in places that have park access deficits.

Local governments will remain critical to addressing the public space deficit. They are primarily responsible for managing, programming, and funding urban parks, public space, public recreational facilities, and the local street network. Local policymakers also have an opportunity to be creative with their economic recovery plans and can ensure that innovations around the use of green space are equity driven and can become permanent. Moreover, local policymakers, in collaboration with community partners, will need to purposefully work to mitigate the risk of green gentrification (Cole et al. 2017), which is the unintended consequence of park investments that lead to displacement in low-income neighborhoods. In fostering planning, design, and transportation solutions, local government agencies must be intentional and include community voices to begin to address these and other challenges (Eldridge, Burrowes, and Spauster 2019).

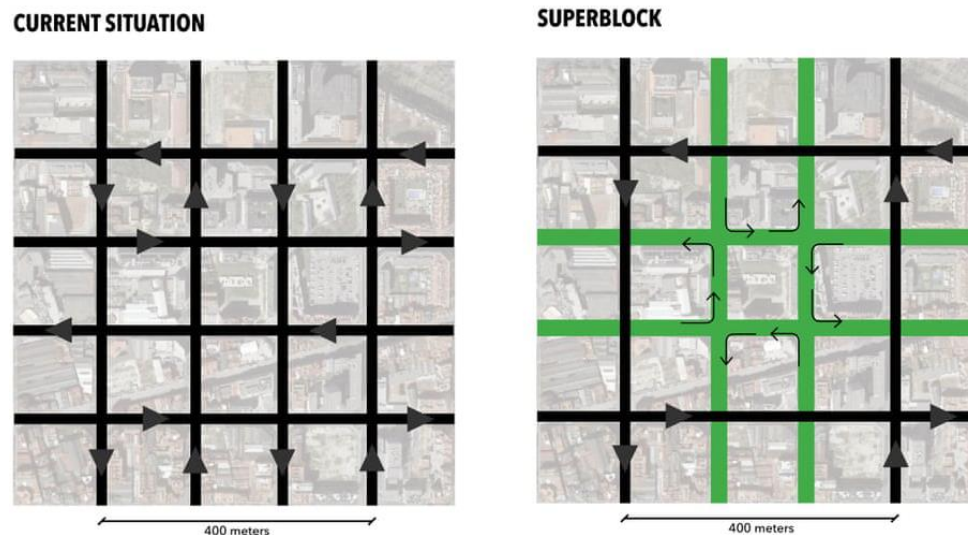
Reclaiming Streets for Public Use in Barcelona: The Superblock Model

Over the past decade, the city of Barcelona has recognized and sought to improve equitable access to quality green space in its most urbanized districts and neighborhoods. As a densely populated city with limited public space and a high dependency on cars, the municipality of Barcelona, through its mobility plan to guide investments from 2013 to 2018 (City Council of Barcelona 2012), sought a new model to reduce traffic congestion and increase green space.

The mobility plan set ambitious goals, including calming traffic 21 percent and reclaiming up to 60 percent of the street for nonvehicular use. As a key component for implementing this vision, the municipality in collaboration with the Urban Ecology Agency¹¹ designed a model they referred to as “superblocks.” The concept of reclaiming streets through superblocks was also formally reaffirmed in additional government plans (City Council of Barcelona 2011).¹²

Superblocks were envisioned as a combination of tactical urbanism and structural change to achieve a more democratic transformation of the city, particularly in its most densely populated neighborhoods. This program repurposed portions of the city grid, often 400-by-400-meter blocks composed of several smaller streets connected to the arterial roads (figure 1).

FIGURE 1
Grid Showing the Street Closures in the Superblock



Notes: Black routes allow public transport and cars at speeds up to 50km/h; green routes allow only private vehicles at speeds up to 10km/h to prioritize pedestrians and cycling.

Source: BCNecologia.

FIGURE 2

View of Superblocks in Barcelona, Spain



Sources: Aerial photo by CloudVisual/Shutterstock; street photo by JOSEP LAGO/AFP via Getty Images.

In a superblock, the interior roads are closed off, redirecting motorized traffic onto the periphery (figure 1). This forms large areas reserved for pedestrian use (figure 2). Limited through-traffic is allowed, and the streets are mostly used by pedestrians, bicycles, emergency vehicles, and public

transportation. Where feasible, curbside parking is replaced with underground parking to reduce surface congestion. Roads are turned into parks and recreational spaces where the community can meet, interact, and patronize local businesses. This model increases activity on the street, one of the key ingredients for vibrant places and neighborhood safety. As Jane Jacobs opined, “When there are people present in a public space such as city streets, it strengthens the space and inspires social cohesion” (Jacobs 1961).

Superblocks aimed to promote public space by reducing through traffic, increasing the amount of green space, reducing vehicle noise and emissions, and strengthening social interactions among neighbors.

Barcelona currently has six superblocks, and the city intends to increase that number to over 500 by 2030 (City Council of Barcelona 2018). If the model expands as planned, the Institute for Global Health estimates that the city can prevent 667 premature deaths every year, increase the average life expectancy by almost 200 days, and have an annual economic impact of €1.7 billion (\$1.87 billion USD).¹³

Notably, Barcelona has several important characteristics and qualities that enable the superblock model. First, the city’s design and street infrastructure were planned and developed before the growth of the automobile industry, creating a people-centric grid. Second, the housing stock, although dense, is designed to prioritize and predispose residents toward public social space. Third, the municipal leadership adopted a platform of climate resilience and people-focused infrastructure. Although these features are not necessary for every city to adopt a version of the superblock model, they helped Barcelona lead this effort.

Projects to calm traffic and reclaim public space are not a new intervention for Spain, but the scale and features of the superblocks model was particularly innovative and can be instructive for other policymakers. Our analysis identified a few key features that explain how the model was developed and why it produced credible impacts on traffic reduction, greening, and neighborhood cohesion in ways that can support an inclusive recovery from the COVID-19 pandemic.

Urban Design and Planning of the Green Block

The concept of “people-first” infrastructure existed in urban planning strategies many years before superblocks were developed. But Barcelona utilized its unique street design and prioritized environmental goals to adopt this approach for reclaiming neighborhoods as public spaces for everyone.

The superblock conversion happened gradually as the city repurposed space using signs, temporary infrastructure, and street activation to encourage residents to use the regenerated space. Such change requires the districts to shift from being vehicle focused to being people focused. There are several key elements of the superblock model, including

- intentional urban design, including density, size and shape, scale, and planning features that foster walkability and fit the community’s needs;
- sustainable funding appropriated through the municipality and long-term financing mechanisms described in national strategies;
- a clear governance structure with a strong mayoral champion to steward the operations and management;
- steps to comprehensively address community health, resilience, and environmental and social well-being by reducing congestion with activated green space multimodal walkways and cycle paths;
- urban greening and the use of green infrastructure to create a vibrant community;
- urban planning and placemaking strategies that seamlessly integrate transportation and land-use policies, programs and projects;
- collaborative and inclusive community engagement processes that elevate people first; and
- plans to mitigate the potential consequences of green gentrification by ensuring equitable access to the converted space from neighborhoods with significant green space and health disparities.

These key design and planning features were also adapted to implement the model in a variety of places. The Poblenou neighborhood, a former industrialized area now located in a less dense part of Barcelona, has the same goals of calming traffic and reclaiming the environmental and social features of the street. By using tactical urbanism techniques such as temporary seating, art installations, trees and park space, and pop-up activities, policymakers reshaped the neighborhood. Many of these features became permanent after the pilot. The size of shared space in Poblenou increased about 70 percent in two years (Oscilowicz et al. 2020).

Greening That Promotes Equity through Citizen-Led Processes

One goal of the superblock policy was to help shift traditional government-led planning to more participatory processes. Residents, business owners, and other community members were invited to engage with the scoping and design of the public space by participating in visioning meetings and providing feedback as each section of the superblock was activated. But this process arose through trial and error. The first superblocks were selected and designed by the municipality, but residents resisted the programming in favor of a more inclusive process to reflect their priorities.¹⁴ Now, districts nominate their location for the superblock, and the municipality collaborates with residents, local organizations, and the city council to determine the design through data and community feedback. The blended strategic design and tactical nature of the superblock development means each superblock has distinct features prescribed by the community based on their context and needs (Joanneum Research and UNDP Croatia 2016).

BOX 1

Implementation Insights from Barcelona

Although superblocks have gained popularity in districts and neighborhoods across Barcelona, concerns around who the model benefits and how the program is implemented have curbed their widespread adoption. These observations should be carefully considered in applying different superblock elements in other cities.

- Some residents and businesses believe that closing streets will **increase traffic on artery roads** and create **problems accessing homes on converted streets** (Mueller et al. 2020). The traffic will need to filter onto the main roadways (figure 1), and if this is not carefully monitored it could lead to congestion. Residents living on the streets closed for superblocks can still drive to their homes, but the change in culture around the use of the street might foster some discomfort.
- Perceptions of declines in business growth and development could limit local government or neighborhood council appetite to engage in the superblock model. Without the presence of vehicular traffic and a location on the street curb, **businesses raise concerns they will get less exposure and in turn fewer sales**. In many US cities, the closure of streets and the reduction of public parking spaces can lead to contentious, sometimes ugly public debates.

Cities that possess a **strong culture of walkability** and use of public space can more easily adapt the model. But residents may have concerns about the reduced access to private businesses and the location of some public transit stops, which older residents may believe are far away from their homes. Cities can mitigate this challenge and benefit more by **connecting with other interventions**, such as increasing bike lanes or improving public transportation quality and modalities that make them more equitable and accessible.^a

^a “Mobility and Transport.” Ajuntament de Barcelona, accessed August 27, 2021, <https://www.barcelona.cat/mobilitat/en>.

Despite this intentionality around equitable planning, many residents are wary of the potential gentrification and displacement that can stem from urban green transformation. The injection of capital into districts and neighborhoods can increase prices for residents, change the social dynamic, disrupt community ties, and fragment the space (Anguelovski et al. 2020; Oscilowicz et al. 2020). To mitigate some of the potential displacement challenges, the superblock approach highlighted the importance of connecting to other public services, such as strong social housing regulations that favor tenant stability by sustaining affordability for residents.

Lessons from the Superblock Model and Considerations for US Stakeholders

Elements of the superblock model could be adapted by US cities as part of an inclusive recovery from the COVID-19 pandemic that ensures equitable access to public spaces. From our interviews with experts and practitioners in the field, we identified insights and impressions on the transferability of the superblock components for communities in the US. We present several lessons to help guide community leaders and policymakers interested in adapting this model. Several aspects of Barcelona's superblock model already exist in other places globally, including a multidimensional public infrastructure strategy that offers opportunities for traffic calming, innovative green space, and social cohesion. This reach demonstrates the model's suitability for a range of flexible uses. Below we identify core concepts and lessons from the implementation of the superblocks model in Barcelona and similar programs elsewhere.

Scale and Scope Can Be Adapted to Different Contexts

One of the most intriguing aspects of the superblocks concept is how communities across the globe adjust its scale and scope to fit local context. In Barcelona, superblocks are designed to fit the city's density, compact urban form, and community and cultural norms and lifestyles. In the US, only a handful of densely populated cities, such as New York or San Francisco, might be able to replicate the model with the scale and scope of the superblocks in Barcelona's densest neighborhoods. The full, partial, or temporary conversion of roads and rights of way, however, can happen in smaller residential neighborhoods or along commercial corridors in the US. Communities can also transform other underutilized infrastructure, such as disused rail tracks or abandoned pipelines, into linear parks and green spaces.

In the 1970s, communities in the Netherlands began to adopt a planning strategy, called the Woonerf, or living street.¹⁵ Similar to the superblock model, the Woonerf prioritizes people-centered rather than vehicle-centered street design. Although cars can travel on the Woonerf, traffic-calming features such as nonlinear roads, narrow paths, barriers, and alternative pavement materials make it difficult to go more than 5 or 10 miles an hour. Greening and engaging design features encourage pedestrians and cyclists to use the reimagined streets.

Similarly, Seattle in 2019 developed its own, smaller-scale way of reprioritizing streets around people, the Home Zone Program,¹⁶ which sought to slow traffic and create safe and walkable neighborhoods. Resident-driven plans can reclaim public space through mix of strategies such as street activation, traffic calming, pedestrian improvements, and even traffic diversions. After two successful pilots in the Broadview and South Park Neighborhoods, the Seattle Department of Transportation selected 20 other neighborhoods as potential Home Zone sites.

Land Use and Transportation Goals Should Work Together

The superblock model operates at the intersection of land use and transportation. Converting roads and rights of way requires careful and creative considerations of traffic patterns, pedestrian safety, existing infrastructure, and mobility preferences within the context of appropriate neighborhood land use and land development visions. The underlying goal of the superblock model is to recalibrate the use of current transportation infrastructure in ways that create new types of public spaces that promote and protect the pedestrian. This conversion also demands different types of transportation infrastructure to ensure pedestrian safety and foster a vibrant, active environment.

Singapore took a different but similarly coordinated approach to converting public space by transforming underutilized corridors such as railways and waterways into its Park Connector Network.¹⁷ Through the program, reclaimed infrastructure becomes green civic assets as part of the government's 2030 goal of expanding from 340 km to 500 km of linear gardens and park connectors.¹⁸ Local governments around the world will need to strategically align their city and neighborhood land-use and transportation policies and plans at many different levels to effectively, efficiently, and equitably adapt superblocks.

Creative Placemaking Is an Opportunity to Rethink Urban Design and Form

The core of the superblock model rests on urban design principles that practice creative placemaking of the converted public space. Creative placemaking affords communities the flexibility to adapt the superblock model to diverse urban forms. In some ways, creative placemaking practices bring the

planning and transportation vision into reality by working directly with residents to design and implement traffic-calming devices, pedestrian improvements, and urban greening techniques such as public art and signage.¹⁹ Dozens of cities in the US have experimented with the concept of “20-minute neighborhoods” to make their communities more walkable and livable.²⁰ This planning concept works toward giving residents the ability to access essential amenities (grocery stores, parks, shops, cafes, etc.) within a 20-minute walk, bike ride, or bus ride. Although urban design experts have been touting this concept for years, the recent interest in this strategy as a result of the pandemic could help spread the superblock model by aligning its principles with current planning and transportation policies and plans.

Greening Efforts Help Localize Resilience Agendas

Replacing or retrofitting concrete and asphalt with a variety of greening features or elements can help activate physical space, welcome the community, expand social cohesion, and advance environmental and climate resilience objectives (Jennings and Bamkole 2019). Greening features can include planting native trees or shrubs, creating interactive or educational green features, or building climate-resilient elements such as rain gardens or bioswales.

Metropolitan areas often have an urban heat island effect given their clusters of buildings, high housing densities (especially multifamily homes), and presence of high traffic from highways and main road arteries. Greening practices can help mitigate noise and air pollution and create permeable surfaces to manage stormwater runoff. The Barcelona superblock model is estimated to have prevented 667 premature deaths by reducing nitrogen dioxide, noise, heat, and improving green space development (Mueller et al. 2020). Greening efforts, such as the design and use of public space more broadly, can be customized and adapted to a community’s unique look, feel, and desires.

Greening former roads and rights of way can also tap a wider range of funding resources and advance citywide plans and policies, such as accessible pedestrian-friendly streets, climate resilience, and urban forestry. Greening former roads with rain gardens and other features could help reduce urban heat island impacts and make neighborhoods more resilient to stormwater flooding. Even older, industrial cities could benefit from the greening efforts in the superblock model because they often have surplus roads and rights of way ripe for regeneration and conversion (Schilling and Velasco 2020).

Use Equity Considerations to Target Public Space Investments

Approaches to reclaim public space could offer a new vehicle for addressing inequitable park access. In the US, this inequity largely arises from decades of structural racism that have caused communities of

color to disproportionately lack access to quality green space through physical barriers, social isolation, low-capacity local governments, or mistrust of government-driven services.

Given the potential health benefits of the superblock model, these investments should be prioritized in areas that disproportionately suffer from negative health outcomes. From a community resilience perspective, the COVID-19 pandemic imposed a tremendous cost on the health and health care systems of many cities, but communities adapted to this health challenge by expanding access and opportunities for public and green spaces. Communities should apply the lens of community health and resilience when determining when, where, and how the superblock model can advance their citywide plans to address health disparities, which are often found in neighborhoods without sufficient access to quality parks and green spaces.

Strategic deployment of superblocks would require strong and deep community ownership in their design, development, and implementation to ensure local residents not only use these new assets and amenities but also reap direct socioeconomic, environmental, and health benefits. But research also shows that reclaiming public space can set the stage for green gentrification, such as with New York City's High Line elevated park (Black and Richards 2020). To combat this possibility, local officials, planners, and community leaders must adopt transparent processes and criteria for where, when, and how it will use its version of superblocks and enact policy and programmatic safeguards to address green gentrification, including equitable development plans and, if appropriate, community land trusts.

Leverage the Many Uses of Public Space to Tap Sustainable Funding Streams

A perennial consideration for US cities is how to adequately fund parks and green space. Because reclaiming streets for public space yields benefits across several dimensions, projects that adapt the superblock model can tap resources earmarked for parks, public health, transportation, environmental resilience, and other priorities. Transportation agencies, given their large budgets and their ownership of street assets, will likely help lead successful conversion projects. Historically, transportation and park planning has not occurred in parallel to public space planning, but visionary transportation leaders may see the benefits of holistic mobility strategies, the alignment of resources and strategies with other agencies, and the repurposing of underutilized assets. A local government, for example, could braid funding from its department of transportation's street repair budget with funds for parks and green space to help neighborhoods incorporate various green and sustainable superblock features. Flexible federal funding streams, such as the recent allocation of American Rescue Plan Act funds and the \$1 trillion infrastructure investment (\$110 billion going to roads and bridges), could provide cross-agency funding streams for critical improvements targeting underserved communities. US cities could

use funds to adapt superblocks as more communities prioritize green space and parks as critical civic infrastructure to promote their residents' physical and mental health.

Strong Local Government Leadership Is Key to Launch Efforts, but Broader Stakeholder Coalitions Are Necessary to Sustain Programs

Given their role and responsibilities in funding and managing local resources (including public spaces), buy-in and leadership from local government officials (including elected officials and leads in agencies such as transportation and parks) are critical to designing and launching programs that reclaim superblocks. But sustaining these programs, ensuring they survive critiques and potential community opposition, and tailoring them to local needs requires the active efforts of a much wider coalition of supporters, including community groups, nonprofit organizations, and businesses. Business improvement districts (BIDs) or eco-districts offer intriguing opportunities for expanding the superblock concept. BIDs and eco-districts operate at the right scale, could bring additional resources, and often have aligned goals and priorities (e.g., increasing street vibrancy, improving quality of life through placemaking, and building local environmental resilience). In Arlington County, Virginia, just outside the District of Columbia, the newly named National Landing BID is leading the charge for a green and pedestrian-oriented transformation of a major state highway that bisects the district. The BID's plan incorporates many features from the superblock model.²¹ Although that transformation is still in the design and development phases, it illustrates the possibilities of engaging other BIDs in the placemaking elements of superblocks and in the eventual operation and maintenance of these green reclaimed spaces.

Applying Elements of the Superblock Model to Enhance Public Space

Many communities in the US, whether spurred by the pandemic or having had plans before it, are exploring policies and programs to reclaim public space from road infrastructure. Here we offer a few thoughts on how communities might leverage lessons to build on these existing efforts and support an inclusive recovery from the pandemic.

- **Capture and capitalize on the lessons from the COVID-19 pandemic:** Communities should take stock and reflect on lessons from their recent repurposing of space for public and green uses. Whether reflection is informal or with more formal methods (surveys, focus groups, community meetings, etc.), it will provide a deeper understanding of what worked and what

did not. In interpreting community input, policymakers should make special effort to elevate diverse perspectives, such as voices from communities that have disproportionately suffered from the health and socioeconomic impacts of the pandemic. These insights and ideas can help strengthen designs, build the case for making temporary projects more permanent, and identify promising pathways for customizing the superblock concepts across a wider range of places and neighborhoods. Leveraging the positive reception and outcomes from these recent projects to help persuade skeptical audiences that repurposing car-centric infrastructure for parks and green space is a promising strategy for improving mobility and access to public space. Further, leaders should connect with and learn from the opportunities and challenges caused by tactical urbanist interventions with similar components that can inform the adaptation of the superblock model.

- **Optimize local government processes to facilitate the conversion of roads and rights of way:** During the darkest days of the COVID-19 pandemic, many municipalities suspended traditional rules and procedures around the use of roads and rights of way. Consider whether some of these process changes could become permanent, which will ease the burden on businesses and residents to request and obtain the requisite local government approvals (though appropriate public input should also be ensured). A dual-track process that enables quicker approval of temporary pop-up solutions (and gathers data on usage) while maintaining greater public input on permanent solutions could offer a balanced path forward. Consider modifying other types of local approval process, such as conditional-use permitting procedures, to include these types of conversions.
- **Examine existing policies and plans to better align policy goals:** Local governments already have a host of existing transportation and land-use policies on the books, each with a set of policy goals and principles that could support the adaptation of the superblock model. Policymakers should carefully examine these existing plans and identify whether the elements of the superblock model might help advance specific goals, including elements that could simultaneously advance goals from several policies and plans. Two common policy goals for the COVID-19 recovery period—boosting inclusive local economic development opportunities and improving equitable access to public amenities—can serve as the foundation for a more equitable approach to neighborhood stabilization and revitalization that is led and sustained by local residents.
- **Use pilot projects to test options and learn about real world conditions:** Although cities' COVID-19 experiences and the implementation of superblocks in Barcelona can offer lessons

and insights, piloting place-based projects is necessary to gain real world, locally relevant evidence. As we heard from Seattle and other US cities, an iterative cycle of scoping/design, testing, data collection, redesign, and scale (with community input at all stages) will provide the foundation for a cohesive, long-term program that could become a popular and successful element of local policy toolkits.

- **Scale promising solutions with an eye toward flexibility and sustainability:** When scaling, build in the flexibility to creatively adapt pilot or demonstration projects into a broader program in different types of communities and neighborhoods with a varied mix of planning, design, urban form, mobility, greening elements, and contexts. At this juncture, if not earlier, it may be strategic for policymakers to adapt terminology and branding for their program that resonates with local conditions and effectively conveys the program's goals. Scaling should advance hand in hand with mechanisms to ensure sustainability, including funding for operations, coordination across relevant government agencies, and continued community engagement and support.

Looking Forward

Superblocks are one approach among a broader set of emerging international planning and design strategies for reclaiming streets for people. The superblock model illustrates that small-scale or short-term tactical conversions of public spaces can catalyze the sustainable transformation of neighborhoods in ways that improve the lives of all citizens, especially marginalized residents. The underlying urban design concept provides a holistic framework for rethinking how to change mobility patterns by converting roads, sidewalks, and public rights of ways to facilitate more equitable, active, and green public spaces. At the same time, communities can adapt the model to fit the urban form, transportation infrastructure, and community context of diverse locations within a city or neighborhood. Regardless of what shape the superblock model takes, citizen involvement throughout the process is crucial to ensure social acceptance of this new neighborhood design and the accompanying shifts in community norms and lifestyles (Joanneum Research and UNDP Croatia 2016).

As communities navigate the road to recovery following the pandemic and as work shifts from central business districts to more decentralized neighborhood nodes, local government officials, private developers, office building owners/managers, urban planners, and civic and community leaders can adapt the insights of the superblock model to fit the needs of our evolving urban life.

Notes

- ¹ Leila Goldstein, “Americans Flock to The Outdoors while Parks Struggle with Funding Cuts,” WYSO, October 3, 2020, <https://www.wyso.org/news/2020-10-03/americans-flock-to-the-outdoors-while-parks-struggle-with-funding-cuts>.
- ² A right of way refers to the easement for people to access land and traverse a specific area. Otherwise known as a passage or thoroughway.
- ³ Pete Wells, “New York Loves Outdoor Dining. Here’s How to Keep the Romance Alive,” *New York Times*, June 29, 2021, <https://www.nytimes.com/2021/06/29/dining/outdoor-dining-nyc.html>.
- ⁴ “Streets Week!: Mayor de Blasio Makes Open Streets Permanent Part of New York City’s Urban Landscape,” news release, Office of the Mayor of the City of New York, May 13, 2020 <https://www1.nyc.gov/office-of-the-mayor/news/361-21/streets-week-mayor-de-blasio-makes-open-streets-permanent-of-new-york-city-s-urban-landscape>.
- ⁵ Anupam Nanda, “Sustainable Cities after COVID-19: Are Barcelona-Style Green Zones the Answer?” *TheConversation.com*, December 15, 2020, <https://theconversation.com/sustainable-cities-after-covid-19-are-barcelona-style-green-zones-the-answer-150774>.
- ⁶ “10 Minute Walk,” Trust for Public Land, accessed July 10, 2021, <https://www.tpl.org/10minutewalk>.
- ⁷ Jon Solomon, “Survey: 31% of Parks Departments Already Cut 2020-21 budgets,” Aspen Institute Project Play, May 5, 2020, <https://www.aspenprojectplay.org/coronavirus-and-youth-sports/reports/2020/5/5/survey-31-of-parks-departments-already-cut-2020-21-budgets>.
- ⁸ “Minneapolis Park and Recreation Board Announces Riverfront Parkway and Road Closures to Help Trail Users Maintain Social Distancing,” Minneapolis Parks & Recreation Board, March 26, 2020 <https://www.minneapolis-parks.org/news/2020/03/26/minneapolis-park-and-recreation-board-announces-riverfront-parkway-and-road-closures-to-help-trail-users-maintain-social-distancing/>.
- ⁹ Henry Graff, “Richmond Installing ‘Parklets’ to Help Businesses During Pandemic,” *WWBT*, March 30, 2021, <https://www.nbc12.com/2021/03/30/city-install-five-parklets-near-local-businesses/>.
- ¹⁰ Stacy Ryburn, “NWA Cities Examining Maintenance, Traffic Patterns with Increased Trail Use,” *Arkansas Democrat Gazette*, May 18, 2020, <https://www.arkansasonline.com/news/2020/may/18/northwest-arkansas-cities-examining-mai/>.
- ¹¹ Salvador Rueda is the director of the Urban Ecology Agency of Barcelona and considered the visionary behind the superblock model. See David Roberts. “Cars Dominate Cities Today. Barcelona Has Set Out to Change That,” *Vox*, September 11, 2019, <https://www.vox.com/energy-and-environment/2019/4/8/18273893/barcelona-spain-urban-planning-cars>.
- ¹² City Council of Barcelona, “Citizens’ Commitment,” accessed August 27, 2021, <https://ajuntament.barcelona.cat/ecologiaurbana/en/what-we-do-and-why/public-commitment>.
- ¹³ Calculated at a 95 percent confidence interval: 0.6–2.8. See Mueller et al. (2020).
- ¹⁴ Feargus O’Sullivan, “Barcelona’s Car-Timing ‘Superblocks’ Meet Resistance,” *Bloomberg CityLab*, January 20, 2017, <https://www.bloomberg.com/news/articles/2017-01-20/barcelona-s-superblocks-expand-but-face-protests>.
- ¹⁵ Ben Gooden, “The Rising Popularity Of ‘The Woonerf Design’: A Living Street Concept for Shared City Spaces,” *City Green* (blog), November 11, 2020, <https://citygreen.com/the-rising-popularity-of-the-woonerf-design-a-living-street-concept-for-shared-city-spaces/>. See also Dan@FOP, “What Is a Woonerf? — Meaning, Pronunciation, Examples,” *FocusOnPlace.com*, August 5, 2019, <https://focusonplace.com/woonerf-meaning-pronunciation-examples/>.

- ¹⁶ “Home Zone Program,” Seattle Department of Transportation, accessed August 27, 2021, <https://www.seattle.gov/transportation/projects-and-programs/programs/home-zone-program>.
- ¹⁷ “Recreational Connectivity: Park Connector Network,” National Parks Board, Singapore, August 5, 2021, <https://www.nparks.gov.sg/gardens-parks-and-nature/park-connector-network>.
- ¹⁸ Melissa Heng, “S’pore’s 2030 goal: More Gardens, Park Connectors,” *Straits Times*, March 5, 2020, <https://www.straitstimes.com/singapore/spores-2030-goal-more-gardens-park-connectors>.
- ¹⁹ “Home Zone Toolkit,” Seattle Department of Transportation, accessed August 27, 2021, https://www.seattle.gov/Documents/Departments/SDOT/PublicSpaceManagement/HomeZone_Toolkit.pdf.
- ²⁰ These are sometime also known as “15-minute neighborhoods,” but the planning, mobility, and livability concepts are the same. Within the past 12–18 months, urban planning scholars and a New York mayoral candidate started using 15 minutes in lieu of 20 minutes. See Haisten Willis, “See You in 20 (or Less): Living Where Access Is within a Short Walk or Bike Ride,” *Washington Post*, May 20, 2021, <https://www.washingtonpost.com/business/2021/05/20/see-you-20-or-less-living-where-access-is-within-short-walk-or-bike-ride/>; Robert Steuteville, “The 15-Minute Neighborhood Gets Its 15 Minutes of Fame,” *Public Square: A CNU Journal* (blog), January 25, 2021, <https://www.cnu.org/publicsquare/2021/01/25/15-minute-neighborhood-gets-its-15-minutes-fame>.
- ²¹ “New Report Shows Route 1 in Crystal City as a Tree-Lined Urban Boulevard,” *ARLnow*, October 6, 2020, <https://www.arlnow.com/2020/10/06/new-report-shows-route-1-in-crystal-city-as-a-tree-lined-urban-boulevard/>.

References

- Anguelovski, Isabelle, Anna Livia Brand, James J. T. Connolly, Esteve Corbera, Panagiota Kotsila, Justin Steil, Melissa Garcia-Lamarca, Margarita Triguero-Mas, Helen Cole, Francesc Baró, Johannes Langemeyer, Carmen Pérez del Pulgar, Galia Shokry, Filka Sekulova, and Lucia Argüelles Ramos. 2020. “Expanding the Boundaries of Justice in Urban Greening Scholarship: Toward an Emancipatory, Antisubordination, Intersectional, and Relational Approach.” *Annals of the American Association of Geographers* 110 (6): 1743–69.
- Balanzó, Rafael, and Nuria Rodríguez-Planas. 2017. “Crisis and Reorganization in Urban Dynamics: The Barcelona Case Study.” Discussion Paper No. 10748. Bonn, Germany: IZA Institute of Labor Economics.
- Black, Katie Jo, and Mallory Richards. 2020. “Eco-gentrification and Who Benefits from Urban Green Amenities: NYC’s High Line.” *Landscape and Urban Planning* 204 (103900).
- Chapman, Ronda, Lisa Foderaro, Linda Hwang, Bill Lee, Sadiya Muqueeth, Jessica Sargent, and Brendan Shane. 2021. “Parks and an Equitable Recovery: A Trust for Public Land Special Report.” San Francisco: The Trust for Public Land.
- City Council of Barcelona. 2011. *Greenery and Biodiversity Plan for 2012-2020*. Barcelona: City Council (Ajuntament) of Barcelona.
- . 2012. *Urban Mobility Plan: 2013-2018*. Barcelona: City Council (Ajuntament) of Barcelona.
- . 2018. *New Urban Mobility Plan: 2019-2021*. Barcelona: City Council (Ajuntament) of Barcelona.
- Cole, Helen V.S., Melisa Garcia Lamarca, James J. T. Connolly, and Isabelle Anguelovski. 2017. “Are Green Cities Healthy and Equitable? Unpacking the Relationship between Health, Green Space and Gentrification.” *Journal of Epidemiology & Community Health* (71): 1118–21.
- Eldridge, Matthew, Kimberly Burrowes, and Patrick Spauster. 2019. “Investing in Equitable Urban Park Systems.” Washington, DC: Urban Institute.
- Gaynair, Gillian, Mark Treskon, Joseph Schilling, and Gabriella Velasco. 2020. “Civic Assets for More Equitable Cities.” Washington, DC: Urban Institute Press.

- Honey-Rosés, Jordi, Isabelle Anguelovski, Vincent K. Chireh, Carolyn Daher, Cecil Konijnendijk, Jill S. Litt, et al. 2020. "The Impact of COVID-19 on Public Space: A Review of the Emerging Questions." *Cities and Health*.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Vintage Books, 1992 reprint.
- Jennings, Viniece, and Omoshalewa Bamkole. 2019. "The Relationship between Social Cohesion and Urban Green Space: An Avenue for Health Promotion." *International Journal of Environmental Research and Public Health* 16 (3): 452.
- Joanneum Research and UNDP Croatia. 2016. "'Superblocks' Free Up to 92% of Public Space in Barcelona!" Besancon, France: Energy Cities.
- Lydon, Mike, and Anthony Garcia. 2015. *Tactical Urbanism: Short-Term Action for Long-Term Change*. Washington, DC: Island Press.
- Macdonald, Joseph A. 2007. "How Cities Use Parks for... Climate Change Management." Chicago: American Planning Association.
- Mueller, Natalie, David Rojas-Rueda, Haneen Khreis, Marta Cirach, David Andrés, Joan Ballester, Xavier Bartoll, Carolyn Daher Anna Deluca, Cynthia Echave, Carles Milà, Sandra Márquez, Joan Palou, Katherine Pérez, Cathryn Tonne, Mark Stevenson, Salvador Rueda, Mark Nieuwenhuijsen. 2020. "Changing the Urban Design of Cities for Health: The Superblock Model." *Environment International* 134 (105132).
- Oscilowicz, Emilia, Jordi Honey-Rosés, Isabelle Anguelovski, Margarita Triguero-Mas, and Helen Cole. 2020. "Young Families and Children in Gentrifying Neighbourhoods: How Gentrification Reshapes Use and Perception of Green Play Spaces." *Local Environment* 25 (10): 765–86.
- Park People. 2019. "Sparking Change: Catalyzing the Social Impacts of Parks in Underserved Neighbourhoods." Toronto: Park People.
- Schilling, Joseph, and Gabriella Velasco. 2020. "Greenventory 2.0: Sustainability Lessons from Small and Midsize Legacy Cities." Working paper WP20JS1. Washington, DC: *Lincoln Institute of Land Policy*.
- Shepley, Mardelle, Naomi Sachs, Hessam Sadatsafavi, Christine Fournier, and Kati Peditto. 2019. "The Impact of Green Space on Violent Crime in Urban Environments: An Evidence Synthesis." *International journal of Environmental Research and Public Health* 16 (24): 5119.
- Shroyer, Aaron, Joseph Schilling, and Erika Poethig. 2019 "Catalyzing Neighborhood Revitalization through Strengthening Civic Infrastructure: Principles for Guiding Place-Based Initiatives." Washington, DC: Urban Institute.
- TPL (The Trust for Public Land). 2020. *The Heat Is On*. San Francisco: The Trust for Public Land.
- UN-Habitat. 2013. *Streets as Public Spaces and Drivers of Urban Prosperity*. Nairobi, Kenya: UN-Habitat.

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